CONVERSION OF EXISTING HOUSING FOR MULTIPLE OCCUPANCY RENTAL PURPOSES

Executive Summary

Alberta
DEPARTMENT OF HOUSING

CONVERSION OF EXISTING HOUSING FOR MULTIPLE OCCUPANCY RENTAL PURPOSES: EXECUTIVE SUMMARY

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Prepared by:

McKellar Architects

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of the
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PREFACE

In January 1982, the Alberta Department of Housing commissioned a study of the technical and economic feasibility of adding rental accommodation to existing and new housing. The study was completed in July 1982. The study included a comprehensive analysis of the implications of existing regulatory requirements, such as the Alberta Building Code, on housing conversion. The study also identified major conversion options and developed and analyzed prototypical designs for each. On the basis of this work, the study made recommendations about the feasibility of house conversions and about possible relaxations to existing regulations which would facilitate conversion while maintaining the safety and livability of the converted housing.

The study was documented in two reports:

Conversion of Existing Housing for Multiple Occupancy Rental Purposes, which is the comprehensive final report on the study; and

Conversion of Existing Housing for Multiple Occupancy Rental Purposes: Executive Summary, which summarizes study results.

Readers should note that the work was completed in July 1982 and that the analysis pertains to the economic conditions prevalent in Alberta at that time.

On May 26, 1986, the Alberta Department of Housing was amalgamated with Alberta Municipal Affairs. Comments about this report or requests for further information should be sent to:

Innovative Housing Grants Program
Alberta Municipal Affairs
10050 - 112 Street
Edmonton, Alberta
T5K 2J1

Telephone: (403) 427-8150

TABLE OF CONTENTS

	Page
INTRODUCTION	1
I. PURPOSE, SCOPE AND APPROACH	2
II. REVIEW OF REGULATIONS	
A. Code Implications	5
B. Pertinent Code Regulations	7
C. Suggested Code Relaxations	11
D. Impact of Code Relaxations	13
E. Conversion Provisions in New Housing	15
III. ECONOMIC ANALYSIS	
A. Cost Estimates	16
B. Financial Implications	19
C. Conversion Examples	22
D. Other Economic Issues	24
IV. OTHER CONSIDERATIONS	26
Appendix - Conversion Examples	

INTRODUCTION

The Home Conversion Study examines several considerations concerning the conversion of existing or new single family housing to multiple occupancy units. A broad range of conversion scenarios are treated, including the provision of self-contained suites, housekeeping rooms, and boarder bedrooms, constructed at the same time as the original house as well as at some later date. The economics of the conversions have been evaluated using models ranging from the work being carried out entirely by a general contractor to the owner making a significant contribution of "sweat equity" in the project. In addition, Alberta building regulations have been reviewed to determine the impact of regulatory requirements on the design, economics, and general feasibility of conversions. The report concludes with an identification of a number of ancillary issues which warrant consideration in addition to the principal topics of the study as relevant concerns in the formulation of a provincially sponsored housing conversion program.

This Executive Summary documents the results of the study. The Final Report, bound separately, provides the detailed technical and economic analysis as well as the plans and details for the various conversion examples used throughout the study.

I. PURPOSE, SCOPE AND APPROACH

Specifically, the purpose of this study is to:

1. assess and recommend on the technical and economic implications and the resulting feasibility of adding rental accommodation to a range of single family detached and duplex housing units;
2. identify existing building and health regulations whose relaxations would facilitate the addition of rental accommodation to existing accommodation while preserving the health, safety and livability of such accommodation and further to estimate the potential implications of such relaxations; and,
3. assess the overall economic viability of various conversion options with particular reference to the benefits that might accrue to the homeowner who would undertake to provide this additional rental accommodation.

The study focuses almost exclusively on technical and economic matters and does not consider a number of other relevant planning factors including land use and local by-law restrictions. To the extent possible the analysis is predicated upon typical forms of single detached and semi-detached housing built over the past few decades including the bungalow, bi-level, split level and two-storey house. A range of types of accommodation are considered, for example: the self-contained suite with living, sleeping, cooking and sanitary facilities; housekeeping units incorporating sleeping, living and cooking in a single room but without integral sanitary facilities; and, sleeping

rooms or boarding rooms which do not contain either cooking or sanitary facilities. These various types of accommodation are then examined in terms of adaptability to existing housing types.

The study consists of two main areas of investigation; a review of existing regulatory requirements and the economic analysis.

The relevant regulatory requirements are the provisions of the Alberta Building Code (ABC), Part 9, and the heating and plumbing requirements and their interrelations with the requirements for fire separation. In addition, electrical requirements and Provincial Health Regulations are also considered. The regulatory requirements cited herein stem from Provincially mandated 'codes' or technical considerations. Municipal zoning and planning ordinances are purposely excluded.

The economic analysis is predicated upon a detailed cost analysis of two potential conversion scenarios, each with various options. A net rentable area of 600 square feet is established as a constant and on this basis a new above ground addition (add-on space) is analyzed versus a basement conversion (add-in space). Various consequences are explored in the economic pro-forma including: the effects of timing ie. conversion at the time of initial construction versus at a later date; use of a general contractor versus the homeowner as general contractor; the addition of 'sweat equity'; and differing interest rates. Tax consequences for the homeowner and the eventual impact of conversion on the net capital gain at the time of sale or liquidation are also examined.

Other observations and conclusions of the study address possible levels of interest subsidy to address a wide range of conversion types, the impact of rental conversion on the demand for rental accommodation, the potential effect of local regulations and local community reaction, the response and capability of the building industry and the difficulties of assessing and predicting conversion construction costs.

The actual conversion design examples, ten in all, contained in the Final Report, provide detailed layouts, summarize potential technical difficulties and conclude with estimated conversion costs. These design examples could serve as relevant prototypes in assessing a range of future conversion possibilities and include a:

- 1A • Bungalow converted to contain a basement suite
- 1B • Bungalow converted to include an added semi-detached suite
- 1C • Bungalow converted to include a suite in a new second storey
- 2 • Bi-level converted to include a basement suite
- 3A • Split level converted to include two boarding rooms
- 3B • Split level converted to include two housekeeping suites
- 3C • Split level converted to include a bachelor suite
- 4A • Duplex converted to a four-plex by development of the basement
- 4B • Duplex converted to include two housekeeping rooms
- 5 • New two-storey converted to two suites

II. REVIEW OF REGULATIONS

A. CODE IMPLICATIONS

A number of provincial building regulatory requirements affect the conversion of existing or new single family housing to accommodate rental space in addition to the original dwelling unit occupied by the owners, whether by adding suites, housekeeping rooms, or boarder rooms within the existing building shell, or by extending the existing building. The bulk of these regulations are in Part 9 of the Alberta Building Code (ABC) although the Provincial Health Regulations and the Canadian Electrical Code also have applicable provisions. It should be noted that amendments to the Provincial Board of Health Regulations Respecting Housing (Division 27) presently exist in draft form, the intention of these amendments being to bring the current regulations into line with the new Alberta Building Code.

Any conversion will require a building permit which may be issued by the local jurisdiction (urban areas) or by the provincial Building Standards Branch (rural areas and small towns). The permit will require adherence to applicable codes and regulations and both the existing accommodation and the converted space will be required to meet multiple occupancy requirements. The conversion will invoke regulations pertaining to: room and space dimensions, window sizes, stair and landing dimensions, exiting, fire protection, sound control, plumbing, ventilation and heating. The electrical system may also require modification for purposes of upgrading, separation of metering or increasing overall capacity.

These regulations can present particular problems for housing conversion in terms of significant technical impediments and/or cost. Conversion can trigger the application of current or more restrictive codes to an existing dwelling which would not otherwise require upgrading. However, a clear distinction seems apparent between housing conversions and large scale multiple occupancy and on the strength of this philosophy a number of relaxations could be argued that would in fact pose a negligible threat to the health, safety and comfort of the occupants. Some flexibility in minimum ceiling heights for basement suites would be one example of the need for greater discretion in applying current regulations otherwise prohibitive costs would mitigate against any conversion.

In reviewing regulatory requirements it is important to distinguish between the various types of accommodation as defined in the ABC. The provision of suites, housekeeping rooms and dwelling units through conversion of existing housing will invoke a number of additional requirements of the Building Code and other regulations; the provision of boarding rooms and sleeping rooms will not.

B. PERTINENT CODE REGULATIONS

A thorough examination of all code implications is contained within the Final Report. The following items summarize the more pertinent concerns:

Room and Space Dimensions (9.5)

The required room heights stipulated in Table 9.5.2.A of the ABC would have serious implications on basement conversion. It would be difficult to meet the requirement of a 2300mm (7'-6½") ceiling height after subtracting duct clearances from ceilings that are only 2290mm (7'-6") to start with. It may also be difficult to meet the minimum dimensional requirements for rooms created within existing spaces, particularly the master bedroom requirement (9.5.6).

Windows (9.7)

The bedroom window minimum dimension requirement would have a significant impact on basement conversion. The typical bungalow basement window has only an area of about 50% of that required. Increasing the size of basement windows imposes a considerable cost premium and may present difficulties with respect to existing grades and sill levels.

Stairs and Landings (9.8)

By virtue of creating a second dwelling unit within the shell of the first where stairs become part of a common exit, several onerous requirements apply. These include the requirement of a minimum of three risers for any such stair; an increase in headroom at the stairs from 1950mm (6'-4 3/4") to 2050mm (6'-8 3/4")

and specified landings at the top and bottom of such stairs. It would obviously be difficult if not practically impossible to meet such requirements in a retrofit condition.

Means of Egress (9.9)

If an existing house were retrofit such that an existing corridor served as an exit for two or more suites, then that corridor must be at least 1100mm (3'-7½") wide. However, typically corridors within single family houses are 915mm wide. Also such common exits must be separated from the remainder of the building by walls having a fire resistance rating of 45 minutes. This necessitates additional layers of gypsum wall board.

Internal corridors serving more than one suite would be essentially required to have an exit at each end. The intent of including boarding rooms under this requirement seems clear.

Fire Protection (9.10)

A basement conversion would trigger the requirement for a 45 minute fire separation between the basement and the main floor and fire rating of all structural elements supporting this floor including beams, columns and bearing walls. In the case of a second storey conversion the required fire separation would be at the second floor and fire rating of the supporting structure must carry through to the basement. Fire separation and fire rating would be accomplished by additional layers of gypsum wall board.

While the penetration of fire rated membranes does not appear to be a problem for heating ducts or electrical fittings there are stringent requirements requiring non-combustible material

for plumbing assemblies that penetrate such membranes. A device has recently appeared on the market for making the transition with combustible piping through fire separations and it has received a ULC certificate.

Existing older homes either already converted for multiple occupancy or with the potential for such and with side yards less than 1200mm (4'-0") seldom conform to the requirement for a 45 minute fire rated sidewall, the omission of window openings and non-combustible cladding.

Sound Control (9.11)

Sound transmission ratings are specified for walls and floors that act as separations, necessitating the addition of mineral wool or resilient channels to wall partitions and mineral wool between floor joists as well as resilient channels on ceilings for floor assemblies. Virtually all existing basement conversions ignore the requirement for sound attenuation through the main floor.

Plumbing Facilities (9.32)

The specific requirement for a bathtub, as distinct from a shower, may present some problems for conversion on terms of available space and is likely contrary to what already exists in many basement suites.

The requirement for laundry facilities is best met with a joint laundry area in a space not identified with any one unit, or in one unit but accessible to the others. Problems with access,

maintenance and clean-up have often lead to the owner retaining sole use of the laundry facility and the renter using the local laundromat.

Heating (9.34)

The heating requirement may inadvertently be among the most onerous of all code requirements. Specifically, the Code prohibits return air from a dwelling unit being circulated to any other dwelling unit. This necessitates separate furnaces for each unit in the case of a forced air plant with all of the coincident problems of space planning, duct work, fire dampering, fire ratings of partitions and so on. It is interesting to note that the City of Calgary Building Regulations Division expects each suite to have its own thermostatic control which again implies separate heat sources.

C. SUGGESTED CODE RELAXATIONS

A number of regulatory requirements have been singled out as possible candidates for relaxation in the case of housing conversion. These are generally regulations which would be potentially troublesome or costlyfor many housing conversions and the relaxation of which would not diminish the concern for the health, safety and welfare of the occupants.

1. Requirements governing dimensions, clearances, etc. for entries which become common to two dwellings within the same house should not differ from those normally associated with a single residence.
2. Existing combustible plumbing systems should not be required to be replaced by non-combustible systems. Either an approved device for transition through a fire separation or insulating the pipe with mineral wool to retard the spread of fire should be considered as alternatives.
3. Minimum ceiling standards should be relaxed in the case of basement conversions to reflect actual conditions. A minimum in the range of 1900mm (6'- 2 3/4") could be considered with an overall height in the order of 2150mm (7'-0 1/2").
4. Requirements for second (or more) heating systems should be relaxed or made discretionary on the part of the building authority. Advantages of separate systems are evident but such duplication is very costly and highly impractical in many situations. Countless suites no doubt presently exist on the basis of a single heating system.

5. The minimum depth of basement windows should be reviewed and relaxed to avoid the problems of enlarging existing basement windows. The minimum depth of 600mm (23½") should apply to only one window per suite to facilitate emergency evacuation. No special requirements should apply to minimum dimensions, sill heights, etc. for windows of second floor dwelling units except those which would normally govern second floor bedroom windows of unconverted houses.
6. Flexibility should be extended to minimum room sizes within converted houses although reduction of minimum standards for bedrooms may come into conflict with health regulations.
7. It should be permissible to have suites without laundry facilities (or with access to laundry facilities within the other unit) rather than requiring each suite to have its own laundry facility, or have the facility located for convenient communal access.
8. It should be permissible to retain existing openings and claddings at side walls of existing houses suitable for conversion where such would not be permitted by standards for new construction. This should definitely be the case for basement conversions.
9. Although not currently a requirement of the Building Code, there should be mandatory provision for emergency access to space and water heating appliances and to electrical panels in situations where each unit cannot be afforded independent access to such items.

D. IMPACT OF CODE RELAXATIONS

The cost of meeting all existing requirements of the ABC would be very substantial for many conversion options. The technical impediments would often be of sufficient magnitude to discourage what might otherwise be feasible conversion options and detailed cost estimating would be virtually impossible in many situations. The Appendix contains illustrations of a number of conversion examples. In general these examples assume relaxation of the regulatory requirements listed in the previous section except for those regarding heating and laundry facilities. They also assume that at least one basement window would have to be of at least the minimum required depth for basement development.

Example 1A, the conversion of an existing bungalow to include a basement suite, well illustrates the impact of those regulatory requirements nominated for potential relaxation. This example assumes relaxation of ceiling heights, basement window dimensions (except for increasing the size of the living room windows) and common entry requirements, but meets the existing requirement for a second furnace and laundry facility. This conversion has been estimated to cost about $27,000 using the services of a general contractor or $30 per square foot. If the assumed relaxations were not granted, conversion costs in this case could rise by at least $8,000, increasing the total cost to $35,000 or $39 per square foot.

Any such estimate of costs would be contingent upon conditions of the existing house and its position on the site with respect to finished grades, setbacks, mature landscaping and drainage. For the selected example, the following additional costs could apply if no relaxations were granted.

1. Ceiling Heights. Requirements would necessitate raising the house from its foundations to achieve the minimum clear dimension of 7'-6½", disconnecting and reconnecting plumbing, heating and electrical systems, extending the foundation wall and making good all finishes to match, as well as repairing damages to the existing house caused by the operation. Costs could conservatively run in the order of $4,500.

2. Window Dimensions. Requirements would necessitate existing basement windows to be increased in size as well as, in most cases, the introduction of additional windows. The most problematic aspect of this procedure would be the treatment of landscape grading adjacent to new windows and the provision of window wells of sufficient size to ensure adequate penetration of light. Costs for retrofitting and adding new windows, installation of window wells and re-grading and landscaping could be in the range of $2,000.

3. Common Entry. Where the 'rear' entry becomes a common entry to two dwellings, as in the example, requirements would necessitate extensive changes to such common entries to meet stair, landing and corridor width dimensions. These changes would obviously infringe on main floor space. Costs could run in the order of $1,500 assuming technical and space planning problems were not insurmountable.

E. CONVERSION PROVISIONS IN NEW HOUSING

Including some of the conversion requirements at the time of construction in order to facilitate later conversion could be very expensive for the home purchaser. It is unlikely, for example, that the initial home purchaser would pay for the fire rating of walls and floors and the inclusion of a second heating system in anticipation of conversion at some future date. These two items could represent costs in the order of $2,500 to $4,000 depending on the unit type and conversion layout. Clearly, paying a premium for such 'upgraded items' is of no benefit for those who never develop the unit's conversion potential.

The most prudent items to include at time of initial construction would appear to be the roughed-in basement plumbing for bath and kitchen and separation of electrical circuits. Since many new homes already have rough-in plumbing for a basement bath the extra kitchen rough-in would be in the order of $200. Separation of electrical circuits would be a negligible cost.

III. ECONOMIC ANALYSIS

A. COST ESTIMATES

The detailed cost estimates are based on the two most likely types of revenue suites for a homeowner to contemplate, namely, the basement suite (add-in space) or the addition of a suite above grade to the rear or side of the existing house (add-on space). The estimates are based on a net rentable area of 600 square feet and all costs have been derived on a modified prorata basis from actual single family housing construction costs (1982). Table 1 summarizes the estimated job costs for the following options:

1. Additional space at or above grade
   a) undertaken coincident with construction of the original unit
   b) undertaken sometime after the original unit is completed
2. Basement development
   a) undertaken coincident with construction of the original unit
   b) undertaken sometime after the original unit is completed
   c) undertaken after completion but with 'sweat equity' by the homeowner.

It should be noted that the actual costs incurred when undertaking a similar specific conversion may vary significantly for a variety of reasons:

1. Prices for given work will undoubtedly vary from community to community within Alberta.
2. Actual costs will be a function of the level of construction activity within a given community at the time the conversion is initiated.

3. The skill and experience of renovation trades will be reflected in cost estimating. Renovators with a reputation for quality will charge accordingly as opposed to fringe operators attempting to penetrate the market. One the other hand inexperienced trades may inflate estimates and contingency amounts to cover their own errors or alternatively reduce the quality of materials and labour.
4. It is impossible to predict the complexities of renovation work until actual work is in progress. As a result, contractors tend to prefer cost-plus contracts with no upset or may otherwise grossly inflate fixed price contracts to counter unexpected problems.
5. Costs can vary considerably depending upon the quality of materials specified and what the homeowner will accept as a minimum standard in matching new and old finishes.

TABLE 1

JOB COST ESTIMATES

600 ft^2 Revenue Space

	Addition		Basement Development		
	At Time Principal Residence Completed	After Principal Residence Completed	At Time Principal Residence Completed	After Principal Residence Completed	After Principal Residence Completed &Utilizing Sweat Equity
	1. a)	1. b)	2. a)	2. b)	2. c)
Hard Building Costs	$27,455	$31,655	$14,800	$17,700	$14,400
Development Costs &Contingency Allowance	$ 3,700	$ 5,625	$ 2,200	$ 3,200	$ 2,600
Contractors Fees	$ 6,231	$13,048	$ 3,400	$ 7,315	NIL
Total Cost	$37,386	$50,328	$20,400	$28,215	$17,000
Cost per Square Foot	$ 62	$ 83	$ 34	$ 47	$ 28
Cost per Square Foot When No General Contractor Utilized	$ 52	$ 62	$ 28	$ 35	$ 28

Note: The conversion examples assume relaxation of all of the regulatory requirements discussed on pages 11 and 12 except those concerning the heating and laundry requirements. Only one basement window of minimum required depth is assumed for basement suites.

From Table 1 it can be seen that a 600 square foot revenue suite as an addition at the time of constructing the principal residence can be completed by the contractor for $62 a square foot. It is unlikely that many typical home purchasers would either have the capability of or want to be the general contractor thereby realizing the lower cost of $52 per square foot. Adding the same unit at a later date and utilizing a general contractor produces an $83 per square foot cost; an increase of approximately one third. This extra cost is attributable to the diseconomies of building a single unit on a scattered site basis, the additional costs of retrofitting and utilizing a renovation contractor as opposed to a "tract house-builder".

Converting basement space into a revenue suite, as one would expect, is a much more economical route for the homeowner to explore. Estimated costs range from $28 per square foot when completing the space simultaneously with the construction of the main residence and with the home purchaser acting as general contractor or alternatively completing the suite at a later date, with approximately a 19% "sweat equity" contribution, to $47 per square foot for conversion at a later date by a general contractor.

B. FINANCIAL IMPLICATIONS

The economic viability of any of these scenarios, in addition to actual costs, is dependent upon the rent levels that can be achieved, the need for immediate income by the homeowner, effective interest rates and the amortization period of the mortgage used to fund the conversion.

Currently such revenue suites, on a comparable square foot basis,

are generally commanding a maximum rent of $600 per month for above grade space and $500 for basement space. Renters tend to be working adults and childless couples and historically basement suites or all forms of rental conversion, for that matter, have not been an attractive proposition for the expanding young family.

Given these assumptions, the data set forth in Table 2 suggests that the basement conversion is economically viable at current interest rates if the homeowner is satisfied to "break even" at the outset and looks to inflation to produce a positive cash flow and a capital gain in future years. The exception would be where a general contractor was retained to complete the conversion at a later date. In this case the break even would be realized at a mortgage rate of 15%.

The addition of 600 square feet at or above grade is basically not viable at interest rates above 13%.

If however, the prime motivation for the existing homeowner is an annual income stream of $3,000, even the basement suite needs effective interest rates in the range of 3 to 7½% to be economically viable.

Two conclusions are inescapable. First, only conversion of space within the existing building envelope has the potential to be economically viable. Second, if the unit is to generate a positive cash flow from day one, a combination of effective below market interest rates and amortization periods in excess of ten years are required.

TABLE 2

FINANCIAL FEASIBILITY

	Addition *		Basement Development **		
	At Time Principal Residence Completed	After Principal Residence Completed	At Time Principal Residence Completed	After Principal Residence Completed	After Principal Residence Completed &Utilizing Sweat Equity
Total Cost					
General Contractor	$37,386	$50,328	$20,400	$28,215	N/A
No General Contractor	31,155	37,280	17,000	20,000	$17,000
Loan Supported at 19%, 10 year amortization	30,200	30,200	24,700	24,700	24,700
Equity Required					
General Contractor	7,186	20,128	-0-	3,515	-0-
No General Contractor	955	7,080	-0-	-0-	-0-
Interest Rate No Equity Required					
General Contractor	13%	6%	N/A	15%	N/A
No General Contractor	18%	13%	N/A	N/A	N/A
Loan Supported at 19%, 10 year amortization if $3,000 Income Required	16,500	16,500	11,000	11,000	11,000
Equity Required					
General Contractor	20,886	33,828	9,400	17,215	N/A
No General Contractor	14,655	20,780	6,000	9,000	6,000
Interest Rate No Equity Required					
General Contractor	0%	Neg%	3%	Neg%	N/A
No General Contractor	0%	0%	7½%	3%	7½%

* Assumed rent of $600 per month

** Assumed rent of $500 per month

C. CONVERSION EXAMPLES

Table 3 is based upon the ten conversion examples developed and fully documented on the Final Report. Of those ten examples, two have been eliminated for this Summary, and the remaining eight appear in the Appendix. The two conversion examples which have been deleted represent the addition of new space to the existing residence, thereby breaking out of the current building envelope. As was shown in the economic analysis only conversion of space within the existing building envelope has the potential to be economically viable and therefore the examples of the bungalow with the added semi-detached suite (960 sq.ft. @ $71/sq.ft.) and the added second storey suite (1,040 sq.ft. @ $59/sq.ft.) are excluded from Table 3. The estimated costs as set out in Table 3 range from a low of appoximately $8,500 where considerable 'sweat equity' is applied to the creation of two boarding rooms within a split level to a high of $30,000 to $35,000 where a general contractor is retained to complete the conversion of a duplex into either a basement suite or two housekeeping rooms. As expected, each of the plans produces a different quantity and quality of space as a result of the original house plan and the ability to retrofit the conversion unit within the specified plan. Estimated costs appear to be in line with those utilized in the detailed financial analysis.

Results indicate that a viable conversion program will require the availability of loans up to $25,000 which is more than twice the loan amount currently being made available by the Province. Such loans would have to carry effective interest rates below 10% if the loan is to be amortized over ten years and the homeowner is to realize a positive cash flow at the outset. The required

TABLE 3

SUMMARY OF AVERAGE COSTS OF ADDING ACCOMMODATION WITHIN THE ENVELOPE OF EXISTING HOUSING

	Hard Building Costs	Development Costs & Contingency Fees	General Contractor Fees	Total Cost Utilizing General Contractor	Total Cost No General Contractor (3)	Total Cost No General Contractor & Sweat Equity * (3-19%)
1A. Bungalow with basement suite	$17,825	$2,350	$7,061	$27,236	$20,175	$16,342
Cost per Sq. Ft.				$ 30	$ 22	$ 18
2. Bilevel with basement suite	$16,888	$2,500	$6,785	$26,173	$19,388	$15,704
Cost per Sq. Ft.				$ 34	$ 26	$ 21
3A. Split level with two boarding rooms	$ 8,245	$2,100	$3,620	$13,965	$10,345	$ 8,379
Cost per Sq. Ft.				$ 32	$ 24	$ 19
3B. Split level with a bachelor suite	$15,442	$2,250	$6,192	$23,884	$17,692	$14,331
Cost per Sq. Ft.				$ 55	$ 41	$ 33
3C. Split level with two housekeeping rooms	$15,386	$2,250	$6,172	$23,808	$17,636	$14,285
Cost per Sq. Ft.				$ 55	$ 41	$ 33
4A. Duplex with a basement suite	$19,986	$2,700	$7,940	$30,626	$22,686	$18,376
Cost per Sq. Ft.				$ 42	$ 31	$ 25
4B. Duplex with two housekeeping rooms	$23,471	$2,800	$9,194	$35,466	$26,271	$21,280
Cost per Sq. Ft.				$ 47	$ 36	$ 29
5. New two-storey with two suites	$10,200	$2,120	$2,464	$14,784	$12,320	$ 9,979
Cost per Sq. Ft.				$ 22	$ 18	$ 15

*Assume client can complete 19% of cost of work themselves.

NOTE: The conversion examples, as illustrated in the Appendix, assume relaxation of all of the regulatory requirements discussed on pages 11 & 12 except those concerning the heating and laundry requirements. Only 1 basement window of minimum required depth is assumed for basement suites.

interest subsidy is greater than that of the current program and represents a very substantial subsidy when compared to existing market interest rates for homeowner improvement loans.

D. OTHER ECONOMIC ISSUES

1. Expanding the Rental Universe by Conversion versus Additional Traditional Units in the Traditional Manner

The addition of rental units to the homeowner stock can be achieved by the typical small investor acting as his own architect and/or general contractor whereas he would probably be unable to act as a developer for rental projects of larger scale. The housing conversion route also has the advantage that land costs are eliminated.

On the other hand, those carrying out conversions suffer the diseconomies of scale encountered by all custom infill entrepreneurs when compared to mass 'tract built' operators.

2. Lifestyle/Investment Motives

Over the past four decades, Canadian households have continuously been attempting to 'improve housing standards' by, among other things, making more space available per person, i.e. increasing privacy. It seems questionable whether many homeowners will voluntarily choose to reduce their privacy by undertaking conversions. Related to this issue is the impact that the addition will have upon perceived property values, both the subject unit and neighbouring units, over a period of time.

3. Tax Consequences

In evaluating the economic feasibility of proceeding with the

addition of a revenue suite the homeowner must consider the tax consequences on regular income as well as the net proceeds to be derived from the operation and eventual disposition of the revenue suite. Tax consequences are not general in nature and can only be predicted on a case by case basis.

The homeowner contemplating such a conversion should complete schematic drawings, outline specifications, cost estimates and net income projections for the specified conversion and subsequently seek guidance from a tax counsellor. If the situation is deemed to be economically advantageous then a determination should be made as to whether to treat net income derived from the revenue suite as being incidental to main income sources or whether to treat it as business income and a separate item. In the former case the homeowner foregoes partial sheltering of income as income accrues through capital depreciation allowance provisions in return for the possibility that National Revenue will treat the appreciation on disposal of the unit as tax free capital gain. This issue should also be thoroughly reviewed with a tax counsellor.

IV. OTHER CONSIDERATIONS

This study has examined the viability of a housing conversion program in Alberta from two points of view: the technical and the economic. However, the conclusions which derive from such an analysis where the scope has been restricted should not be construed as a tacit dismissal of all other considerations as having negligible influence on the overall viability of the program. In fact, the opposite is probably true. Although a great deal of the study focused on regulatory requirements, it is only fair to point out that the viability of a conversion program does not hinge on technical considerations: rather, these factors only modulate the cost and physical design of the eventual conversion.

From the economic analysis it is apparent that for a provincially sponsored housing conversion program to successfully address a wide range of conversion options, significant interest rate subsidies would be required unless current interest rates were to drop below the 13% level. However, a sizeable decline in interest rates would also stimulate the provision of new rental accommodation and diminish the demand for rental conversion. If the province were to consider an interest subsidy to increase the supply of rental accommodation, conversion may well be the most difficult to implement for a whole host of technical, economic and political reasons.

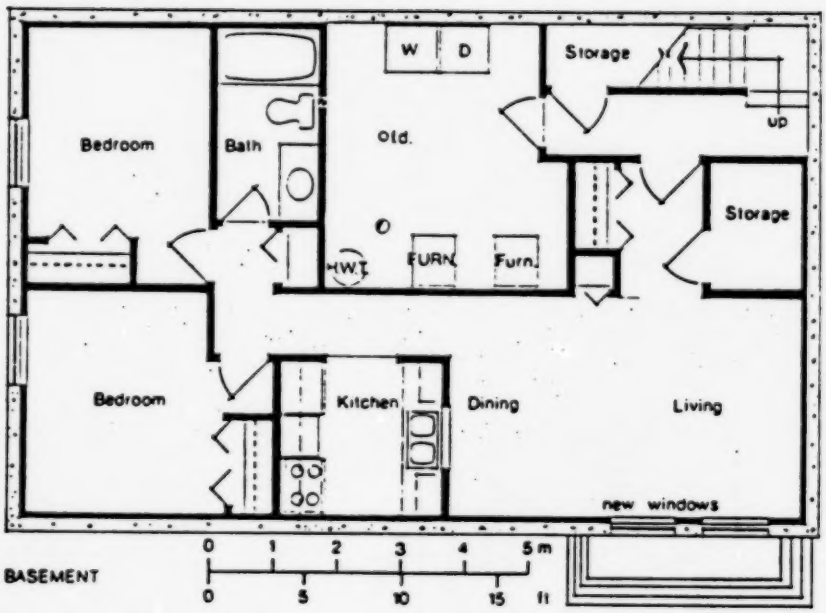
A number of issues not specifically included in the terms of reference of this study could be critical to the eventual success of a conversion program.

- Restrictions imposed by municipal by-laws, particularly those concerning land use, could limit the in-place housing stock available for conversion.
- The fears, however real or imagined, of existing communities to increased parking and traffic, unsavory renters, noisy parties and so on, as a result of rental conversion can sustain very strong political opposition to the program at the local level.
- At present the building industry is not well equipped to deal with renovation work. In general, renovation work is technically demanding and requires a high level of skill and expertise. Unfortunately the building industry's interest in renovation occurs only during downturns in new construction and skilled tradesmen are quick to return to new construction once the economy strengthens.
- Renovation costs are clearly a sensitive function of the general economic climate of the industry at any given time. It is well recognized that cost estimates for a given renovation can vary by as much as 100%, depending upon many factors including the strength of new construction activity. A period of extreme low ebb in new house construction, such as is currently being experienced, may well produce false readings as to conversion costs and the level of interest throughout the industry.

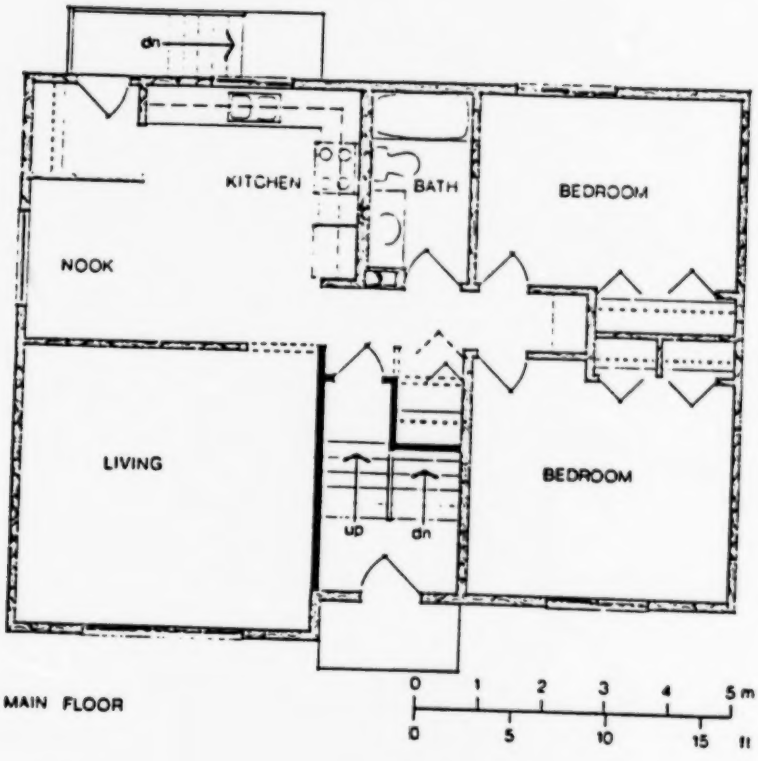
This study demonstrates that the technical obstacles imposed by provincial regulatory requirements are not insurmountable, but that conversions would be facilitated by certain relaxations. The economics of conversions, however, are more marginal and interest rate subsidies would be called for to promote a range of conversion opportunities. In addition, several other considerations should be examined in the context of the overall viability of a conversion program. These include the impact of municipal zoning by-laws, the availability of existing housing stock, community and political attitudes toward conversion, and the capability and response of the building industry.

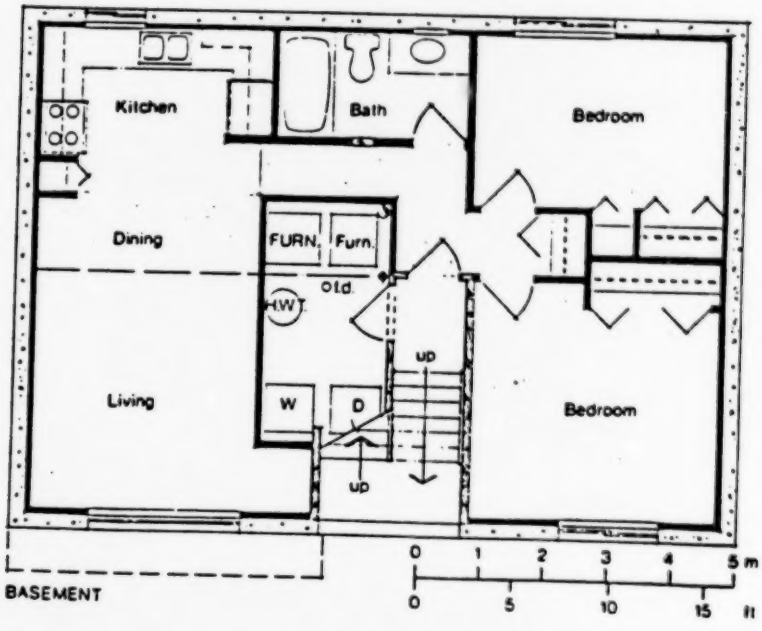
APPENDIX

The Appendix contains eight examples of "viable" conversions, i.e., conversions which are economically viable because they can be carried out without breaking out of the envelope of the original building.

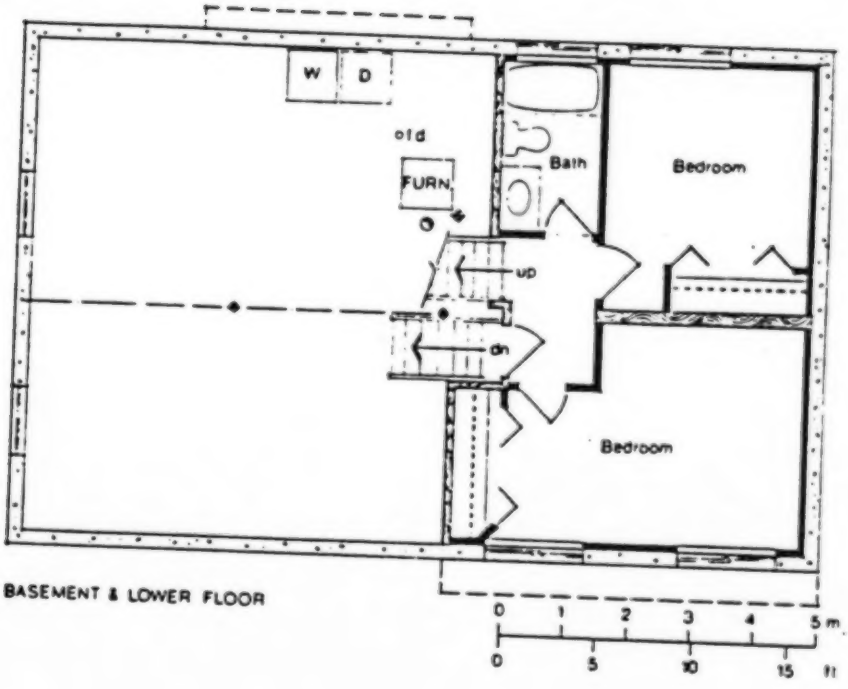


1A. Conversion of the basement of a bungalow to a self-contained suite.

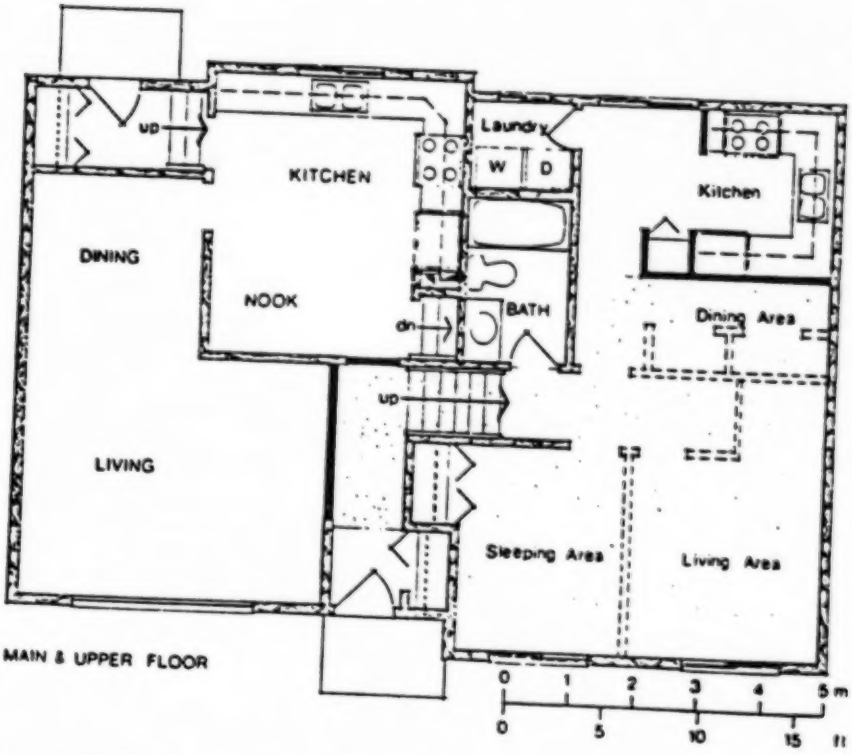




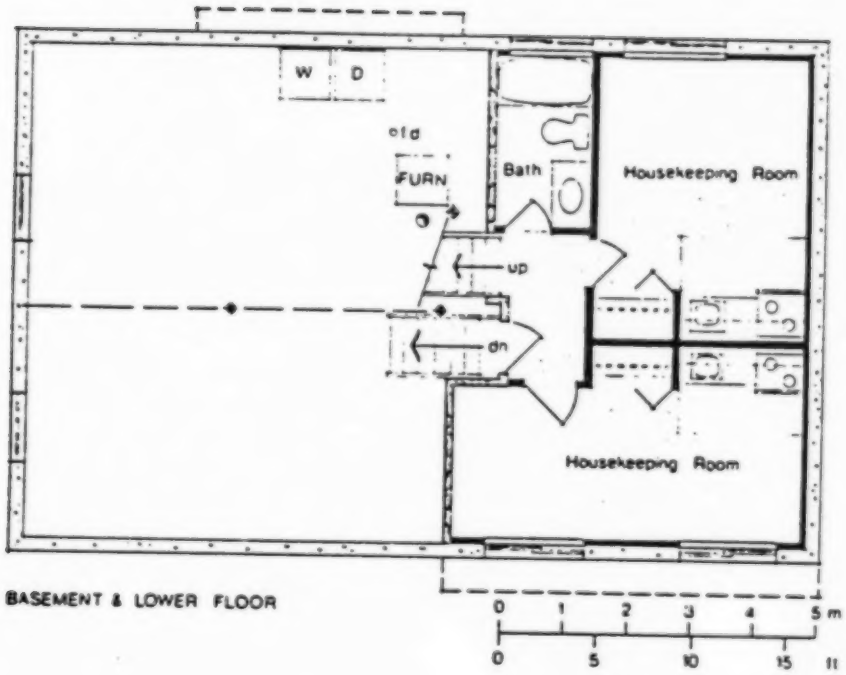
2. Development of the basement of a bilevel house as a self-contained unit.



3A. Development of the lower level of a split-level house as two boarder rooms.

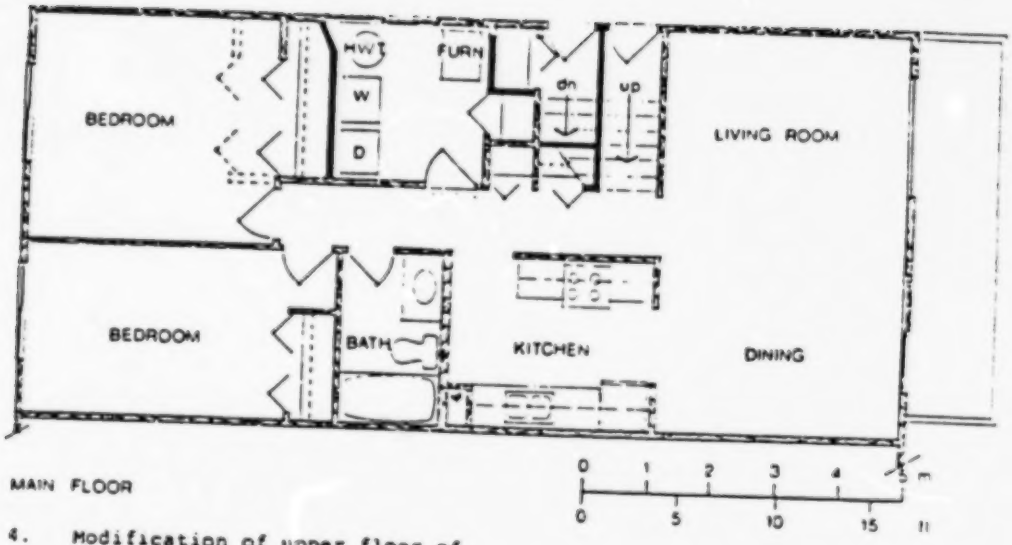


3B. Development of the upper level of a split-level house as a bachelor apartment. This development also requires development of the lower level as bedrooms for the main house similar to 3A.



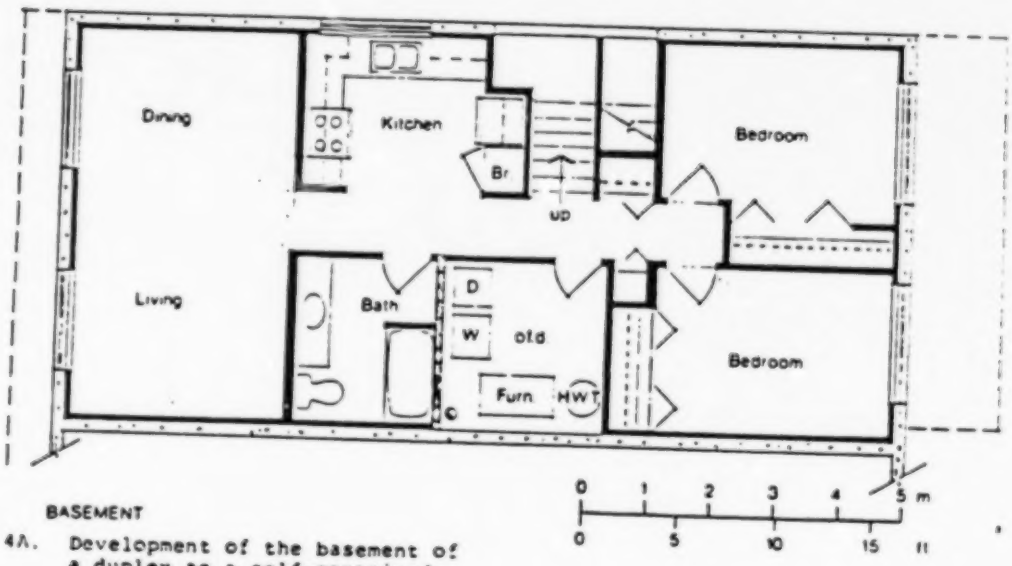
BASEMENT & LOWER FLOOR

3C. Development of the lower level of a split-level house as two housekeeping rooms.



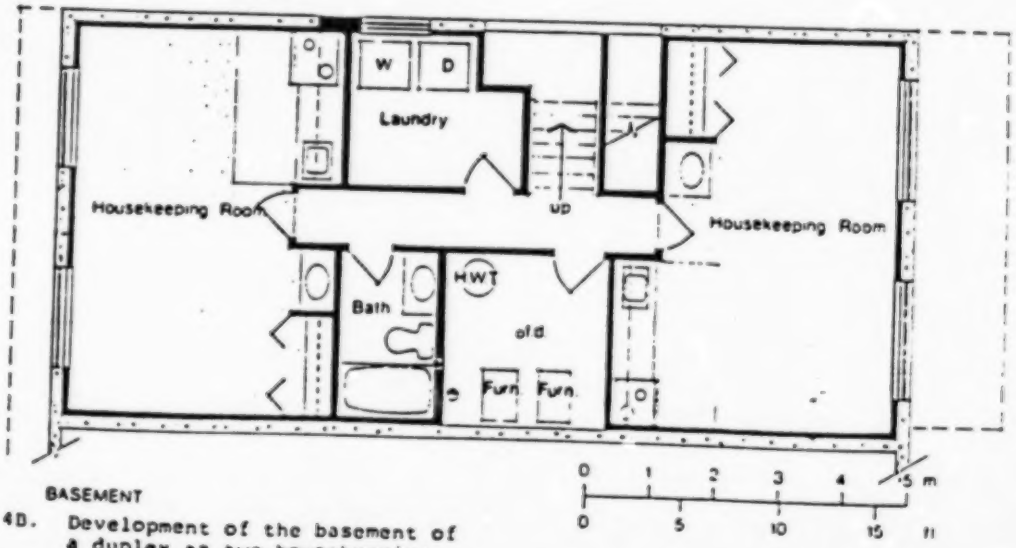
MAIN FLOOR

4. Modification of upper floor of a duplex two facilitate development of basement.



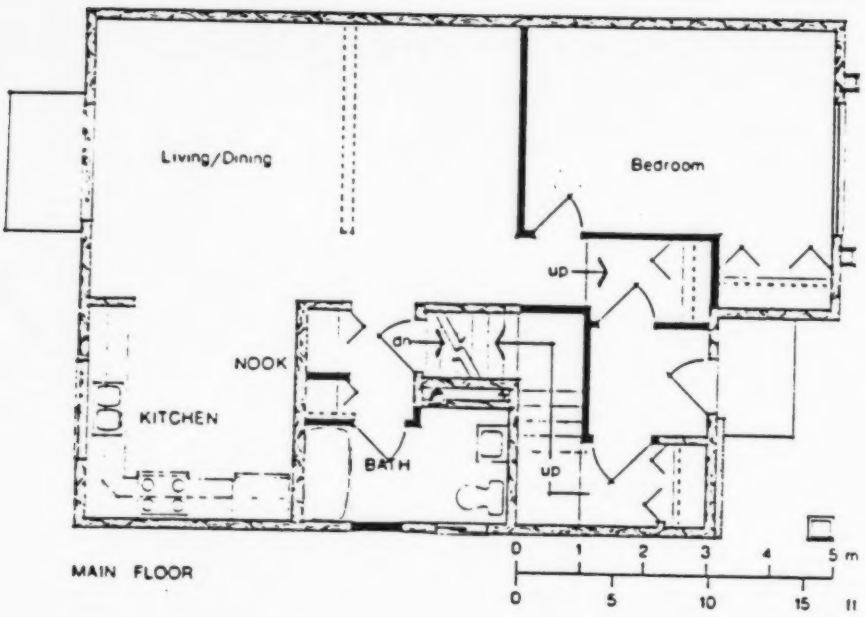
BASEMENT

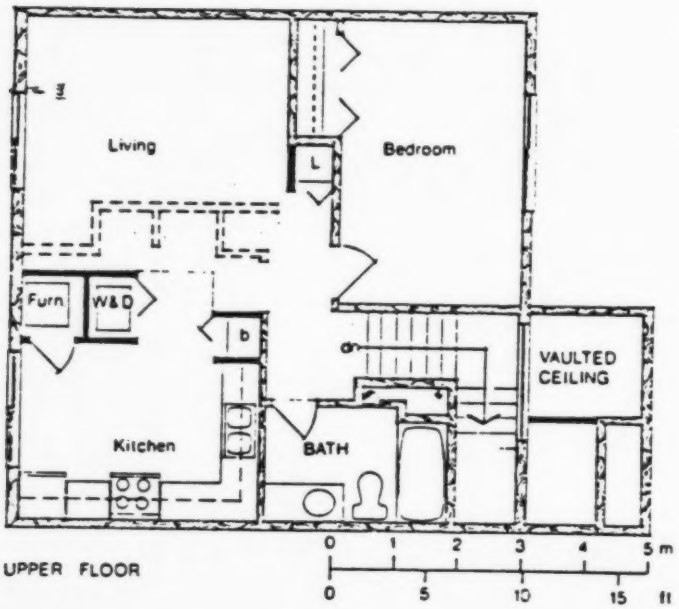
4A. Development of the basement of a duplex as a self-contained suite.



BASEMENT

4B. Development of the basement of a duplex as two housekeeping rooms.





5. Development of the upper floor of a new two-storey house as a self-contained unit.